

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (previously presented): A paper sizing composition which comprises an aqueous emulsion of alkenyl succinic anhydride wherein the alkenyl succinic anhydride incorporates a maximum of 1% by weight of polymeric residues.
2. (previously presented): A composition as claimed in claim 1 wherein the alkenyl succinic anhydride incorporates a maximum of 0.5% by weight of polymeric residues.
3. (previously presented): A composition as claimed in claim 1 wherein the alkenyl succinic anhydride contains less than 5% by weight of olefins.
4. (previously presented): A composition as claimed in claim 3 wherein the alkenyl succinic anhydride incorporates less than 0.5% by weight of olefins.
5. (currently amended): A method of producing a sized paper or board by adding to the wet-end or by size press a sizing agent which is an alkenyl succinic anhydride incorporating a maximum of 1% by weight of polymeric residues.
6. (previously presented): A method as claimed in claim 5 wherein the alkenyl succinic anhydride incorporates a maximum of 0.5% by weight of polymeric residues.
7. (previously presented): A method as claimed in claim 5 wherein the alkenyl succinic anhydride contains less than 5% by weight of olefins.
8. (previously presented): A method as claimed in claim 7 wherein the alkenyl succinic anhydride incorporates less than 0.5% by weight of olefins.

9. (previously presented): A method as claimed in claim 5 wherein the sizing agent is a paper sizing composition which comprises an aqueous emulsion of alkenyl succinic anhydride wherein the alkenyl succinic anhydride incorporates a maximum of 1% by weight of polymeric residues.
10. (previously presented): Sized paper or board produced by the method of claim 5.
11. (original): Sized paper or board as claimed in claim 10 provided on both surfaces thereof with a barrier coating of a food grade material.
12. (original): A method of producing a carton comprising sterilising paper or sized board as claimed in claim 10 with hot hydrogen peroxide and converting the sterilised paper or board to a carton.
13. (new): A method according to claim 5, wherein the polymeric residues have been removed from the alkenyl succinic anhydride at or below said maximum.
14. (new): A paper sizing composition which comprises an aqueous emulsion of alkenyl succinic anyhydride wherein the alkenyl succinic anhydride incorporates a maximum of 1 % by weight of polymeric residues and the alkenyl succinic anhydride has a lower Gardner color when compared to alkenyl succinic anhydride having 7-9 % by weight polymeric residues.
15. (new): A paper sizing composition according to claim 1, wherein the aqueous emulsion of alkenyl succinic anhydride has a lower rate of hydrolysis when compared to alkenyl succinic anhydride having 7-9 % by weight polymeric residues.
16. (new): A paper sizing composition according to claim 14, wherein the lower Gardner color is a maximum of 2.
- 17.(new): A method according to claim 9, further comprising a stabilizer.
18. (new): A method according to claim 17, wherein the stabilizer is a starch, cationic polyacrylamide or other cationic polymer.
19. (new): A paper sizing composition according to claim 15, further comprising a stabilizer.